



# UNITED STATES PATENT AND TRADEMARK OFFICE

AL

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,830	08/19/2003	Bor Yann Chuang	BHT-3117-153	3085

7590 01/31/2005  
TROXELL LAW OFFICE PLLC  
SUITE 1404  
5205 LEESBURG PIKE  
FALLS CHURCH, VA 22041

EXAMINER
----------

SELF, SHELLEY M

ART UNIT	PAPER NUMBER
----------	--------------

3725

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/642,830	CHUANG, BOR YANN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shelley Self	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Drawings*

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because of the following:

- They do not include the following reference sign(s) mentioned in the description: *11, 12, 13, 131, 1311, 121, 14, 151, 41, 42, 43, 411, 421, 4111, 4211, 412, 422, 44, 31, 41 & gap (a, b or c).*

- They include the following reference character(s) not mentioned in the description: *21, 22, 23, 60, 61, 63, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 731, 732 & 791.*

Additionally reference characters (30) and (40) are defined as four-threaded rods and a planing table respectively, however the drawings depict (30) as part of the planar cutter housing and (40) as a clamp or bracket relating to connecting rod (50). (See figures. 3, 4). Correction is required.

Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

The drawings should be reviewed for clarity, and inclusion/illustration of every reference character defined in the specification and every reference character depicted in the drawings defined within the specification.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *four threaded rod bases, four gap nuts, four springs, bolts, backlash nut(s), annular spring holder, locking threaded holes,*

Art Unit: 3725

*positioning holes, and annular spring receiving groove* (clms. 1-3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 2 and 3 are objected to because of the following informalities: The claims state, "*The device for eliminating backlash of the threaded rod of a plane machine as claimed in claim 1*", however, claim 1 states, "*A device for eliminating a gap of the threaded rod...*" Because claims 2 and 3 are directly dependent upon claim 1, the preamble of claims 2 and 3 should

correlate to that of claim 1. For example, claim 2 should read, --The device for eliminating a gap of the threaded rod of plane machine as claimed in claim 1--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 1, there is no antecedent basis for the term, "Each said backlash nut". It is unclear if the backlash nut refers to the four gap nuts recited in line 8 or if the backlash nut and gap nuts are different. If the two are different it is unclear how they interrelate. Correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 as best as can be understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Shadeck (5,957,174) in view of Liao et al. (6,481,474). Shadeck discloses a device for eliminating a gap of the threaded rod of a plane machine (fig. 1) comprising a bottom base (fig. 1), said bottom being respectively fixed with threaded rods (64) extending upward,

Art Unit: 3725

said rods respectively screwed with rod bases (78) provided at the planing table (fig. 1), said planing table adjustable to move up and down (fig. 1, 2): characterized by gap nuts (112) screwed with the threaded rods (64), springs (110), fitted between said gap nuts and said threaded rod bases, each nut screwed upward to press each said spring to push against said threaded rod base, said threaded rod base having its inner threads moved to closely push against the outer threads of each said threaded rod, the gap between said inner threads of said threaded rod base and said outer threads of said threaded rod able to be eliminated (col. 5, lines 49-68 to col. 6, lines 1-20). Shadeck does not disclose four threaded rods. Liao teaches in a similar art, the use of four threaded drive rods (figs. 1, 2) for allowing a rising and lowering a portion of the planar apparatus. Because the references are from a similar art it would have been obvious at the time of the invention to one having ordinary skill in the art to provide Shadeck with an additional two threaded rods for improved stability during vertical movement as taught by Liao.

***Allowable Subject Matter***

Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if any 35 U.S.C. 112 rejection(s) were overcome.

The following is an Examiner's statement of reasons for allowance: The art of record does not disclose an gap nut having an annular spring holder respectively bored with locking threaded holes and positioning holes, at least one of said positioning holes aligned with one said locking threaded hole as set forth in claim 2.

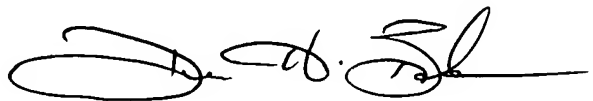
The prior art reference, Shadeck disclose a planing mechanism having a device for eliminated the gap of the threaded rod of the planing machine, having plural threaded rods, and a spring surrounding the rods, a nut threadably engaging the external threads of the threaded rods and a retention member (bolts) used to engage the backlash nut, threaded rod and planing carriage/table. Shadeck does not disclose or suggest any spring holder bored with locking threaded holes and positioning holes as claimed in the present invention. Accordingly, claims 2 and 3 contain allowable subject matter.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIE or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf  
January 24, 2005



DERRIS H. BANKS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700